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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,058	03/03/2005	Takahito Ichi	040370	1014

23850 7590 05/05/2006

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EXAMINER

NGUYEN, TRI V

ART UNIT PAPER NUMBER

1751

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Can

Office Action Summary	Application No.		Applicant(s)	
	10/502,058		ICHI ET AL.	
	Examiner		Art Unit	
	Tri V. Nguyen		1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 1 and 11-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/30/04 10/29/04</u> | 6) <input checked="" type="checkbox"/> Other: <u>ids (cont). 5/25/05</u> |

DETAILED ACTION***Drawings***

1. The drawings are objected to because improper labeling on Figure 1A and 1B: the y-axis label is absent. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 11-15 are objected to because of the following informalities:

A. Claims 1 and 11-14 recite the limitation of "purple corn color". In order to be consistent with the present disclosure, the Examiner suggests changing "color" to "coloring agent".

B. Misspelling in Claim 15, "claims 1" is to be changed to "claim 1".

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C. Claims 12 and 14 are missing an ending period.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda et al: (JP59-223756).

Yasuda et al. discloses a method for the extraction of anthocyanin from purple corn by immersing the purple corn in a 10 parts of 1% sulfuric acid at 40°C for 30 hours, adsorbing the solution with Diaion HP-50, rinsing with water and finally eluting the pigment with ethyl alcohol. After the removal of the alcohol, the ultrafiltration is applied to the pigment solution (pages 4-5, example 1). The obtained pigment demonstrates an extremely transparent red.

Yasuda et al. does not explicitly disclose the claimed limitations of a desorption solution between 25 to 45 or 28 to 45 % v/v hydroalcoholic solution, the specific volume and space velocity of the desorption solution through the resin. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the desorption step of using 2 parts 58% volume of ethyl alcohol as taught by Yasuda et al. also leads to the pigment being desorbed from the resin absent of unexpected results.

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Regarding claims 11-14, Yasuda et al. does not explicitly disclose the claimed limitations of the composition and the spectral values of the dye result. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the compositions as taught by Yasuda et al. would encompass the claimed ingredients and properties because Yasuda et al. teaches similar method steps applied to similar purple corn extract. The Examiner further notes that the USPTO is not equipped to perform laboratory testings and experimental benchworks to measure the properties of the resulting composition. The burden is on the applicant to prove otherwise.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Fossen et al. (J. Agric. Food Chem. 2001) discloses the isolation and structure elucidation of anthocyanins in *Zea Mays* flower tops.

B. Kotake et al. (JP 61036364) discloses a method for purifying anthocyanin dyestuff from purple corn.

C. Nakatani et al. (Agric. Biol. Chem. 1979) discloses a scheme for the extraction and purification of pigments from *Zea Mays L.* (purple corn).

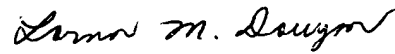
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri V. Nguyen whose telephone number is (571) 272-6965. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nvt


LORNA M. DOUYON
PRIMARY EXAMINER